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The tangled web of mobile telecommunication mergers: Hutchison Whampoa, Telefónica and BT

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Abstract

Purpose - This paper aims to demonstrate how consolidation within Europe's mobile telecommunication markets requires willing buyers and sellers.

Design/methodology/approach – After highlighting the resurgence in merger and acquisition (M&A) activity in mobile telecommunications, the paper draws on a variety of secondary sources to analyse the strategies of three companies.

Findings - The paper highlights the interwoven nature of the strategies of three companies: BT, Hutchison Whampoa and Telefónica. BT has returned to the mobile telecommunications market in the UK, with the company it did not acquire being purchased by Hutchison. As Hutchison implements a "double or quits" strategy in Europe, it has acquired operations from Telefónica, which, in turn, has exited most of its non-Spanish European operations to focus on Latin America.

Research limitations/implications - The paper relies on secondary data and thus highlights the challenges of doing so and the need for more information regarding M&As to be in the public domain. Practical implications - There is a need to adopt a sector-wide or regional approach for analysing the strategies of telecommunication companies.

Originality/value - The paper uniquely provides an overview of three corporate strategies to show how they interact with one another.

Keywords Europe, Consolidation, Mergers and Acquisition

Paper type Research paper

1. Introduction

Over the course of the past year or so, the global telecommunications industry has shown a renewed interest in merger and acquisition (M&A) activity. In Mexico, for example, AT&T has acquired lusacell and Nextel Mexico, as it positions itself to compete against América Móvil (AT&T, 2015; Cellular-News, 2015b; Crow et al., 2015; Lennighan, 2015g), while, in Canada, Rogers Communications has agreed to acquire Mobilicity (Lennighan, 2015)). In Africa, Orange is in talks to acquire four of Bharti Airtel's subsidiaries (Lennighan, 2015o). Merger rumours are widespread in India and several possible combinations of operators – for example, Telenor and Tata, RCom and Sistema - have been discussed in the press (Cellular-News, 2015c; Lennighan, 2015c).

M&A activity has been particularly pronounced across Europe. In France, for example, Altice not only acquired SFR for €13.33bn in late 2014 but followed this up in June 2015 with a bid of €10bn for Bouygues Télécom (Morris, 2014; Wood, 2015c). More modest deals have taken place in Spain and Switzerland. In Spain, Orange paid €3.18bn to acquire control of Jazztel (Lennighan, 2015m), while, in Switzerland, NJJ Capital acquired Orange Switzerland for €2.3bn from Apax (Lennighan, 2014a). Elsewhere, it is rumoured that Deutsche Telekom has offered the Slovakian Government €900mn to acquire the 49 per cent of Slovak Telekom that it does not already own (Lennighan, 2015i). In other countries, mergers have occurred or are planned. In Macedonia, for example, the mobile operations of Telekom Austria and Telekom Slovenije were authorised to merge in July 2015

Received 6 August 2015 Revised 17 November 2015 Accepted 17 December 2015 (Cellular-News, 2015d; Lennighan, 2015n), although in Denmark, the planned merger between Telenor and TeliaSonera collapsed as a consequence of the regulatory conditions that were imposed and then rejected by the operators (TeliaSonera, 2015; Thomas, 2015j).

While these M&As highlight how the European telecommunications landscape is changing, there is a tendency to focus on individual countries or deals. As such, the "bigger picture" that links several countries together and reflects the changing strategic priorities of telecommunications companies is overlooked. Accordingly, it may not be clear why operators are exiting certain countries while investing in others. Within Europe, it is possible to identify three companies – Hutchison Whampoa, Telefónica and BT – where changing strategies, and hence footprints, interact with one another. As Telefónica has focused its non-Spanish European operations on Germany while simultaneously expanding its Latin American operations, its exit from Ireland and the UK has coincided with the desire of BT to once again provide mobile services and that of Hutchison Whampoa to gain scale economies through purchasing rivals in its existing markets. By looking at these three companies together, it is possible to illustrate the often overlooked point that successful M&A activity requires willing buyers and sellers (Curwen, 2015).

With this in mind, the remainder of this paper is divided into five sections. In Section 2, the focus is on Hutchison Whampoa and its purchase of competitors in Austria, Ireland and the UK. This is followed by a discussion of the changing strategic focus of Telefónica in Section 3, and the return of BT to mobile telecommunications in the UK in Section 4. The various mergers and takeovers are discussed in Section 5, with conclusions being drawn in Section 6.

2. Hutchison Whampoa - investing yet more in Europe

Hutchison Whampoa – hereafter Hutchison – has been a patient and long-term investor in the European mobile telecommunications industry (Curwen and Whalley, 2014). After developing and then selling Orange in the UK, Hutchison returned to the European market through the 3G licensing process around the turn of the millennium. However, this return has been fraught with difficulty – competing against well-entrenched incumbents without an installed 2G subscriber base has proved to be a costly process. In each of the European markets that it entered – Austria, Ireland, Italy, Denmark, Sweden and the UK – Hutchison was, for some time, the smallest. As such, it lacked the scale economies to enable it to compete against its well-entrenched rivals. To counter this, the company has engaged in what can best described as a "double or quits" strategy – it has bought larger rivals in Austria and Ireland, made an offer for a larger rival in the UK and is rumoured to be about to merge in Italy to create that country's largest mobile operator.

The first country in which Hutchison acquired another operator was Austria. In late 2011, it was reported that Hutchison 3G Austria had made an offer for Orange Austria, a rumour that was confirmed in February 2012. Hutchison offered \$1.3bn to MidEuropa Partners and France Télécom – a sum that would be adjusted down when various assets were sold to Telekom Austria to satisfy competition concerns. After scrutiny by the European Commission, the purchase was finally approved in January 2013.

The next country into which Hutchison expanded was Ireland. Although Hutchison and Vodafone had entered into an infrastructure-sharing joint venture in Ireland in July 2012, it emerged less than a year later that Telefónica was discussing selling O₂ Ireland to Hutchison. This was confirmed in late July, with Hutchison Whampoa tabling a bid worth €850mn. Interestingly, Hutchison would pay an initial €790mn and possibly an additional €70mn if O₂ Ireland achieved certain financial targets (Smyth and Johnson, 2013). Regulatory issues, again concerned with the impact of consolidation on competition in the market, delayed finalisation of the deal until May 2014 (Lennighan, 2014b). In their final approval document, the European Commission highlighted the competitive impact of 3 Ireland on the Irish market and their concern that the merger would cause this to cease

despite concessions offered by Hutchison to offset this (European Commission, 2014b). Almost immediately, Hutchison sought to improve its infrastructure within Ireland, awarding a contract to Nokia Networks to modernise its network (Lennighan, 2014b). It also began to reduce its cost base, removing duplicate staff from its head office (Cellular-News, 2014b).

Shortly after the merger in Austria, it was confirmed that Telecom Italia and Hutchison 3G Italy were in merger discussions. As these discussions did not progress to the satisfaction of Hutchison, they were terminated in July 2013 (3 Italia, 2013). It was suggested at the time that the two parties could not agree on the valuation of the assets to be sold (TeleGeography, 2013). More recently, Hutchison has discussed merging its Italian operations with those of VimpelCom (branded as Wind). Although it was rumoured in mid-2014 that these discussions had stalled over the respective stakes to be held in the merged entity (TeleGeography, 2014h), talks, in fact, continued into 2015. It was rumoured that Hutchison would end up as the majority owner, with a 51 per cent stake (Thomas and Massoudi, 2015d), while other reports suggested that Hutchison would take over Wind (Lennighan, 2015b). The new entity would be the largest by market share in Italy, followed by Telecom Italia and Vodafone (Lennighan, 2015j). As a consequence, given that both 3 Italia and Wind had competed largely on the basis of price, it was speculated that the merger would reduce competitive pressures on Telecom Italia and Vodafone as well as enable all three remaining companies to raise prices (Lex, 2015c).

In August 2015, the details were announced: Wind and 3 Italia would merge in a deal valued at €21.8bn (Lennighan, 2015p). Although the merger valued Wind at €13.9bn and 3 Italia at €7.9bn, the two parent companies would each own 50 per cent of the joint venture holding company that would, in turn, own the two mobile operators (CK Hutchison Holdings Limited, 2015; TeleGeography, 2015c). At the time of the merger, it was suggested that cost savings of €700mn would be achieved within three years (Hughes and Mance, 2015), and that "innovation and investment" within Italy would be hastened[1]. Almost two months after the merger announcement, the Italian Government stated that it would not block the combination (TeleGeography, 2015g). Despite this, the government did impose a series of obligations on the merger (TeleGeography, 2015g), which is also subject to scrutiny by the competition authorities.

In November 2014, in the midst of the M&A speculation in the UK, it was suggested that Hutchison could "gate crash" the deals that were being discussed (Gabriel, 2014). A merger with, for example, Telefónica's O₂ network would result in a company without fixed-wire operations that would nevertheless attract regulatory scrutiny due to the reduction in competition in mobile markets that it would represent. Just a few days later, Hutchison announced that it was preparing to bid for either EE or O₂. The same report noted that with BT and Hutchison looking to acquire a mobile operator apiece, other networks in need of a mobile link such as BSkyB and Virgin Media would be considering their responses (TeleGeography, 2014I).

With the sale of EE to BT agreed, Hutchison directed its full attention towards Telefónica and the possible purchase of O_2 UK. It was widely reported in late January 2015 that it would cost Hutchison around £9bn to acquire O_2 , and that one factor favouring the purchase was the relationship between the two companies and the pressing need for Telefónica to reduce its debt burden (Lennighan, 2015a; Telefónica, 2015). Not that long after these details emerged, Hutchison entered into exclusive talks to acquire O_2 UK for £10.25bn (TeleGeography, 2015b). Of this, £9.25bn would be paid up-front and another £1bn once the merged entity's cash flow reached an agreed threshold (Wood, 2015a).

In March 2015, Hutchison agreed to buy O_2 for £10.3bn (Thomas, 2015c). The split between up-front and subsequent payments was as noted above. To help fund the purchase, a stake would be sold to one or more sovereign wealth funds from the likes of Qatar, Singapore and Canada (Thomas, 2015d). In May 2015, it emerged that Hutchison had agreed deals with five investors totalling £3.1bn in exchange for 33 per cent of the new

entity (Lennighan, 2015f). Two investors would each contribute £1.1bn, while another £900mn would come from three others (Hughes and Thomas, 2015). Perhaps, surprisingly, Hutchison has discussed an initial public offering (IPO) of the new entity with these investors (Thomas, 2015k). Not only would the IPO provide a liquid market in which shares could be bought and sold, but it would also create a market value for the company.

In mid-September 2015, Hutchison submitted an application to the European Commission for approval of the merger (TeleGeography, 2015d). However, this led to speculation that the UK Competition and Markets Authority (CMA) would request the European Commission to permit the CMA the exclusive right to evaluate the merger (Lennighan, 2015r; TeleGeography, 2015e) – as indeed transpired after a preliminary analysis by the CMA concluded that it would affect competition in both retail and wholesale markets (Competition and Markets Authority, 2015b).

3. Telefónica – readjusting its strategic focus

In June 2012, Telefónica approached KPN with the intention of acquiring its German subsidiary, E-Plus. This approach was rejected by KPN as it believed that it undervalued E-Plus. Rather than returning with another bid, Telefónica opted instead for a partial exit of the German market through an IPO of its local subsidiary in October 2012. This raised €1.45bn and enabled Telefónica to remain as majority shareholder with a 76.8 per cent stake (Curwen and Whalley, 2014). As the economic rationale for merging the third and fourth largest networks in Germany remained compelling, Telefónica returned to KPN in July 2013 and made an improved offer which valued KPN at €8.1bn via a combination of €5bn in cash and a 17.6 per cent stake in (the enlarged) Telefónica Deutschland (Telefónica, 2013). Should the deal be completed, Telefónica would end up owning a reduced but still a majority stake – 65 per cent – in the post-merger Telefónica Deutschland (Powell, 2013). While the merger would considerably increase the ability of the merged entity to compete against its rivals through access to scale economies, it would remain smaller than either T-Mobile or Vodafone with a market share of 30 per cent compared to their (roughly) 35 per cent apiece (Irish Times, 2013).

As expected, the purchase was subject to regulatory scrutiny. The European Commission opened its investigation into the merger at the end of 2013 (European Commission, 2013, 2014a), noting that it might reduce competition in the retail and wholesale markets. In late February 2014, it emerged that the Commission was unhappy with the purchase (Valsamaki and Thomas, 2014; White *et al.*, 2014) and it was rumoured that Telefónica would shortly start to discuss a range of possible solutions with Brussels (Barker and Thomas, 2014).

In July, the EU cleared the purchase subject to several conditions. These conditions sought to enhance competition within the German mobile market, and were as follows:

- The sale of 30 per cent of the combined entity's network capacity prior to the completion of the deal to one or more mobile virtual network operators (MVNOs).
- The divestment of radio spectrum and other assets to either a new mobile network operator or a MVNO.
- The commitment to extend existing wholesale agreements with both Telefónica and E-Plus (European Commission, 2014c).

In early September, the EU finally cleared the purchase (Cellular-News, 2014a; Total Telecom, 2014). In so doing, the way was paved for E-Plus to become a wholly owned subsidiary of Telefónica Deutschland and for KPN to receive both cash and shares in Telefónica Deutschland Holding (TeleGeography, 2014d). To fund the purchase, Telefónica Deutschland raised €3.6bn in new capital, primarily from Telefónica (TeleGeography, 2014c). Telefónica completed the purchase of E-Plus at the start of October 2014 (Lennighan, 2014d; Telefónica, 2014).

In mid-October, Telefónica Deutschland announced that it would seek to reduce its costs through shrinking its workforce by 1,600 jobs by 2018 (TeleGeography, 2014g). The results announced in February 2015 highlighted the need for this – although it beat market expectations, the company's margins were low when compared to other European networks, suggesting, according to the *Financial Times*, downward pressure on prices in the German market (Lex, 2015b).

In November, Telefónica announced that it had agreed to sell yourfone, one of the brands acquired as part of E-Plus, to Drillisch (TeleGeography, 2014j). The deal closed in early January 2015, and although the sale resulted in the transfer of 235,000 subscribers from E-Plus to Drillisch, the precise financial value of the sale was not mentioned – Telefónica vaguely stated in November 2014 that it expected the deal to be "in the medium to high double digit million euro range" (TeleGeography, 2015a). This sale was consistent with the terms of the conditions imposed on Telefónica Deutschland by the European Commission. More recently, the merger has been challenged in the EU General Court (Wood, 2015d). In June 2015, Airdata AG lodged an appeal, arguing that the law had been incorrectly applied and that the concessions made by Telefónica were inadequate to protect competition (EU General Court, 2015; Wood, 2015d)[2]. Airdata has also argued, albeit in a different court, that the licence conditions stated that the owners must remain independent of one another through the period covered by the licence (Wood, 2015d), and that Telefónica should have returned some of its spectrum to the regulator.

In early August 2014, it emerged that Vivendi was seeking to sell GVT, its fixed-wire Brazilian network (TeleGeography, 2014a), and a few days later, Telefónica launched a bid to acquire GVT. The cash and share deal, which was valued at €6.7bn, would simultaneously enhance its position in Brazil and reduce it in Italy (TeleGeography, 2014a). After a short-lived bidding war for GVT between Telefónica and Telecom Italia, the Spanish incumbent was able to claim victory in September 2014 (TeleGeography, 2014b). Telefónica offered to pay €4.66bn in cash and transfer a 7.4 per cent stake in its combined Brazilian operations together with its 5.7 per cent stake in Telecom Italia (TeleGeography, 2014b; Thomson, 2014). This represented a considerable improvement over the €3.9bn initially offered by Telefónica, and a larger cash component compared to the deal offered by Telecom Italia in August 2014[3].

However, the initial terms of the deal were subsequently amended. Vivendi would now receive €4.99bn in cash and a 12 per cent stake in the combined operations of Telefónica and GVT (Lennighan, 2015h), and would buy a 5.7 per cent stake in Telecom Italia from Telefónica in exchange for 4.5 per cent of its stake in the combined Brazilian operations (Lennighan, 2014d). In May 2015, the Brazilian operations of Telefónica raised €4.7bn in new capital to fund the purchase of GVT (Lennighan, 2015h). Telefónica had earlier raised capital of its own to partially fund the cash portion of the deal (Lennighan, 2015d).

In November 2014, it was reported that Telefónica could reconsider its presence in the UK market if it emerged that converged services were growing in popularity (TeleGeography, 2014k). While the report suggested that Telefónica itself identified little demand for such services from consumers, it noted that BT was preparing to launch a mobile service and that the situation would be reviewed again in the future (Thomas, 2014f).

At the start of 2015, rumours emerged that Telefónica was discussing the sale of its UK operations with British Sky Broadcasting (BSkyB) (Sweney, 2015). That Telefónica was looking to exit the UK market came as no surprise given that it had previously sought to sell O₂ to BT, although in the event the incumbent had settled on purchasing the larger and technologically superior EE from Deutsche Telekom and Orange. However, this sale was considered unlikely, as BSkyB had recently purchased pay-TV companies in Italy and Germany (Sweney, 2015). At roughly the same time, it was also rumoured that Telefónica was discussing the sale of O₂ UK with Hutchison Whampoa, the owner of 3 UK. Some reports suggested that Telefónica was willing to sell O₂ UK due to the increasing tendency

of its rivals to offer converged services, something that at that time it was unable to do (Thomas, 2015g).

In early 2015, Telefónica agreed to sell O_2 UK to Hutchison Whampoa as discussed previously. The purchase would create the largest mobile operator in the UK (Thomas and Massoudi, 2015a) and would be financed by a combination of debt and equity, with a possible £3bn of new equity being raised from sovereign wealth funds (Thomas, 2015e). Prior to the deal being announced, some analysts speculated that costs savings of between £2 and 5bn were possible (Thomas, 2015a), although at the time of the purchase, this had narrowed to between £3 and 4bn (Thomas, 2015e). It was also suggested that the sale of O_2 UK would free resources that could be used to fund Telefónica's purchase of GVT in Brazil (Total Telecom, 2015a). One sector-wide advantage of the deal from the perspective of operators was that it would facilitate price increases (Thomas and Massoudi, 2015b).

4. BT - returning to mobile telecommunications

In response to the high debt burden that BT had incurred in the late 1990s, the company decided to float several of its mobile businesses as mmO_2 (Curwen and Whalley, 2004). When this occurred in November 2001, it marked the exit of BT from mobile telecommunications. As can be seen from Table I, this absence lasted only a couple of years, as in May 2004, BT Mobile signed an MVNO agreement with Vodafone (The Register, 2004). Although BT Mobile did launch a series of services and, at one point, claimed a subscriber base growing at 20,000 per month, the company had fewer than

Table	BT's involvement in mobile telecommunications post mmO ₂ IPO
Date	Event
2001 2004	November – Divestment of mobile operations as mmO ₂ May – BT Mobile signs MVNO agreement with Vodafone. BT Mobile claims subscriber growth of 20,000 customers per month
2008 2009	May - BT ToGo service launched using a HTC device January - Rumours of a three-way joint venture between T-Mobile, 3 UK and BT emerge
2011	March – BT renews its MVNO contract with Vodafone for five years. It is claimed that BT Mobile has less than 100,000 subscribers
2013	February – Niche Spectrum Ventures Ltd pays £186.5mn for 4G spectrum April – BT begins search for a company to help support its expansion into the mobile telecommunications market October – BT enters into exclusive talks with EE to replace Vodafone as its MVNO
2014	provider March – BT signs MVNO deal with EE August – launches 4G services using EE as its MVNO October – BT denies rumours that its MVNO plans are behind schedule due to technical problems associated with WiFi/4G traffic handover November – BT enters into talks with Telefónica to acquire O₂ UK November – Telefónica's CFO states that selling O₂ UK is one way for them to reduce its year-end debt to the targeted €43bn November – BT announces that it in talks to acquire either EE or O₂ UK December – BT enters into exclusive talks to acquire EE for £12.5bn in cash and shares
2015	December – BT plans £2bn rights issue to fund purchase of EE February – BT agrees to buy EE for £12.5bn in cash and shares February – Raises £1bn to help fund purchase of EE March – Launches low cost handset offers onto the market March – Launches SIM only 4G services May – BT Mobile claims 50,000 customers for its 4G services
	s: BT (2008, 2009, 2011, 2014a, 2015a); Curwen and Whalley (2004); Mobile Today (2011); Dynamics (2011); Ray (2013); The Register (2004); TeleGeography (2014e, 2014f); Thomas

100,000 subscribers when the MVNO agreement with Vodafone was renewed in March 2011 (Mobile Today, 2011; MVNO Dynamics, 2011)

In February 2013, BT participated in the UK's 4G auction through one of its subsidiaries, Niche Spectrum Ventures. The company paid £186.5mn for 15 MHz paired and 20 MHz unpaired in the 2.6 GHz band (Ofcom, 2013). At the time of the auction, it was unclear how BT would use this spectrum, and it subsequently emerged that BT was searching for a partner to assist with the development of its mobile operations (Thomas, 2013). Somewhat surprisingly, the purchase of the spectrum did not result in BT ending its MVNO operations. Indeed, BT entered into exclusive negotiations with EE in October 2013 to replace Vodafone as its MVNO host (Ray, 2013). This switch was confirmed in March 2014, with 4G services eventually being launched in August 2014.

In March 2014, rumours emerged indicating that BT would soon be attempting, once again, to develop its mobile operations (Thomas, 2014c). It was suggested that BT could develop a "quad play" service, which, although uncommon in the UK, has proved to be a successful way for European incumbent operators to generate a fresh source of revenue. Alternatively, it was suggested that BT could develop a SIM-only service or seek to build on its extensive WiFi infrastructure when developing new services (Thomas, 2014c). However, it was noted that this was not the first time that BT had sought to reinvigorate its mobile operations (Thomas, 2014b).

A few months later, in mid-July, BT announced a new mobile service (Thomas, 2014d). The service would be cloud-based, include 4G mobile data and WiFi access and bring together the customer's mobile and fixed-wire connections. While initially available only to businesses, it was suggested by some analysts that the service would enable BT to convert some of its solely fixed-wire residential users into combined fixed-wire/mobile consumers (Thomas, 2014d). As no mention was made of these mobile initiatives in the press coverage of the quarterly results to September 2014, it is reasonable to conclude that they have not been that successful (TeleGeography, 2014i). In October, BT was forced to deny rumours that it was experiencing technical difficulties in handing over traffic between its WiFi and 4G networks (TeleGeography, 2014e, 2014f).

In November 2014, BT announced that it had entered into preliminary talks with Telefónica to acquire O_2 in the UK (BBC, 2014). Moreover, BT also stated that the owners of another operator, believed to be Deutsche Telekom and Orange, had approached it to acquire EE, their UK-based joint venture[4]. Accordingly, BT was now in simultaneous negotiations to acquire either O_2 or EE. Of the two, it was suggested that the purchase of O_2 would be the more straightforward acquisition – not only was it smaller than EE but it was owned by a single company (Thomas, 2014e). The purchase of either mobile operator would enable BT to provide "quad-play" services, thus placing it at a competitive advantage over UK rivals like Virgin Media or Vodafone.

As was to be expected, the amount that BT would have to pay to buy either operator was somewhat unclear. Deutsche Bank, cited in the *Financial Times*, claimed that O_2 was worth £9bn, while other reports suggested a slightly higher figure for O_2 and between £10 and 11bn for EE (Lex, 2014a; The Guardian, 2014; Thomas, 2014g). Other commentators stated that BT could use its shares as part-payment, with one suggesting that Telefónica would be amenable to taking some shares in BT given the importance of the UK as a source of innovations (Thomas, 2014g). One report suggested that Telefónica would be "happy" to take a 20 per stake in BT (Handford, 2014a).

With reports emerging of support for a deal among the largest shareholders of BT (Williams and Armstrong, 2014), the momentum behind a deal was clearly building. This continued when the CEO of Orange indicated in early December that a conclusion would be reached before Christmas 2015 (Thomas and Barker, 2014). Despite this, reports were also emerging which stated that the board of BT had not yet decided to bid for either company (Wood, 2014b). The arrival of the CEO of Telefónica in London further raised expectations

that BT would acquire O_2 and not EE (Wood, 2014c). However, this was not to be case as BT announced on 15 December 2014 that it would enter into exclusive talks about acquiring EE (Handford, 2014b). One reason for this was EE's 4G geographical coverage while another was its larger customer base (Lex, 2014b; Thomas, 2014h). In addition, the purchase of a substantial mobile business would reduce BT's financial reliance on Openreach, its infrastructure division (Thomas, 2014h). While BT promised "significant synergies" (TeleGeography, 2014m), the deal would also allow the company to generate revenue through cross selling its services and developing a "quad-play" proposition (Thomas, 2014i).

BT offered £12.5bn for EE, with around half of this sum being paid for in its shares (Goodley and Garside, 2014). Upon completion, Deutsche Telekom would own a 12 per cent stake in BT and be able to appoint one board member, while Orange would have a 4 per stake in the company (BT, 2014b). To help fund the deal, BT stated its intention to raise capital through a rights issue (Williams and Marlow, 2014). Initially, this was expected to be in the region of £2bn, although in the event, just £1bn was raised when it took place in February 2015 (Total Telecom, 2015b).

The deal was agreed in early February 2015. Broadly speaking, the official announcement of the purchase confirmed the details that had emerged in December 2014, namely (BT, 2015a):

- £5.1bn paid to Deutsche Telekom, comprising 1.2bn new shares in BT and a small cash payment.
- £5.1bn paid to Orange, comprising 400 million new shares in BT with a total value of approximately £1.7 and 3.4bn in cash.

What was newly revealed were details regarding the limitations and obligations placed on Deutsche Telekom and Orange as BT shareholders. Both would be subject to a three-year restriction on purchasing additional BT shares (BT, 2015a) although they could acquire shares from one another. If this occurred, Deutsche Telekom would be capped at holding 15 per cent of BT and Orange at 4 per cent (BT, 2015a). Once the deal was complete, Deutsche Telekom would not be able to sell its shares for 18 months and Orange for 12 months. If BT sought to cancel the deal, it would pay a £250mn break-up fee to Deutsche Telekom and Orange (Thomas, 2015f).

The confirmation of the purchase also qualified the "substantial savings" that BT mentioned in December 2014. It was suggested that BT would be able to save as much as £4.6bn across a range of areas – for example, sales, marketing and administration – once the two companies had been integrated (Thomas, 2014a). Other reports suggested that BT would save, by the fourth year after the purchase, £360mn a year on capital expenditure (Thomas and Massoudi, 2015c). Interestingly, the *Financial Times* stated that the presence of Deutsche Telekom on the BT board could help the company integrate its services (Lex, 2015a).

Predictably, the purchase would require regulatory approval. One issue raised was whether BT could continue to own Openreach as the purchase would mean that it would control two geographically extensive networks (Heath, 2014). As a consequence, the deal could result in BT dominating the UK telecommunications market (Thomas, 2014i). Another issue related to the amount of spectrum that the combined BT/EE mobile operations would own (Heath, 2014). It was suggested that owning too much spectrum could be resolved relatively easy through selling some to Hutchison Whampoa (Heath, 2014).

In March 2015, the CMA sought the views of industry participants (Thomas, 2015b) as part of the first phase of its inquiry which involved several stages with a decision due on 9 June 2015. Rivals immediately expressed their concern about the impact of the deal on the broadband market given that it could reduce the availability of fibre as well as a concern that it could enable BT to provide services to itself on preferential terms (Thomas, 2015h).

More generally, as part of their response to Ofcom's strategic review of digital communications, BT's rivals have called for the CMA to investigate Openreach (Wood, 2015e). These rivals, including TalkTalk and Vodafone, have argued that Ofcom lacks the necessary regulatory powers to address the shortcomings that are present in the market, and have suggested that BT should divest Openreach (TeleGeography, 2015f; Thomas, 2015l).

Countering these arguments, BT has announced a series of new broadband investments as well as improvements in the quality of service provided by Openreach to its customers (BT, 2015b), and has defended the existing regulatory framework (McIntosh, 2015a). Indeed, BT has gone so far as to argue that its continued ownership of Openreach is "vital" for the UK economy (Lennighan, 2015s). Ed Vaizey, the communications minister, has also joined the fray, describing himself as being sceptical of the need to separate Openreach from BT (Thomas, 2015m). While BT's rivals would presumably be disappointed by such a statement, it is worth noting that Vaizey is also quoted as stating that he "would go with the trend of the review" (Thomas, 2015n). By mid-October, there was a widespread agreement among analysts that separation was unlikely (McIntosh, 2015b). In addition, Fitch, the ratings agency, has recently suggested that a referral to the CMA or outright structural separation would create uncertainty for bondholders (Cellular-News, 2015e). One source of uncertainty would be how the existing debt could be re-structured in the event of a separation, while another is what would happen to the pension liabilities.

On 9th June, the CMA announced that the deal would be fast-tracked to the second phase of the inquiry (Competition and Markets Authority, 2015a). Subsequent to the approval of the deal by BT's shareholders at the end of April 2015 (Lennighan, 2015e), BT started to promote the advantages of the deal. Interestingly, BT is promoting itself as the "new champion for UK communications" and argues that competitive benefits will emerge as a result (Wood, 2015b). As the merger is between a fixed-wire and a mobile operator, BT has argued that it will not reduce competition in the mobile market (Lennighan, 2015k). Indeed, in its response to the CMA, Ofcom did not express significant objections to the merger (Ofcom, 2015), with Lennighan (2015q) going as far as to describe the regulator as being "unfazed" by the purchase.

In late October 2015, the CMA approved the merger, noting that while competitors may have concerns, these do not result in a competitive problem (Competition and Markets Authority, 2015c). It stated "that the merger is not expected to result in a substantial lessening of competition in any market in the UK" (Competition and Markets Authority, 2015c). While BT welcomed the decision, its rivals continued to complain about the effect of the merger on the market (McIntosh, 2015c; Weinger, 2015).

5. Discussion

In the previous three sections, a series of mergers have been analysed. While there is a tendency to examine M&As in isolation, the three cases we have detailed are, in practice, linked to one another. They are linked, in particular, by the simple truth that sellers need buyers and vice versa. More substantively, the strategic reorientation of Telefónica away from northern European markets created an opportunity for Hutchison to gain the scale economies that it was missing. And the desire of BT to re-enter the mobile market in the UK, brought both O2 and EE "into play" and ultimately resulted in two mergers being announced.

As these mergers have either only recently been completed or are still navigating the regulatory waters, it is somewhat difficult to assess their impact in terms of either costs or prices. Nevertheless, it is possible to draw on the above analysis to explore key issues within each of the mergers. The willingness of Hutchison, as a relatively new entrant, to engage in consolidation across Europe has been motivated by its need to grow so that, with a larger subscriber base, it will be able to achieve the scale economies necessary for it to

compete against its rivals. Hence, it is important to assess the impact of the consolidation involving Hutchison on its financial performance.

Drawing on Table II, what we can say is that, in 2012, Hutchison made more money in Sweden than it did in the UK, a significantly larger market. Since then, the company's performance in the UK has improved considerably while that in Sweden has declined. The company is also performing better financially in Austria, with EBIT improving from €16mn in 2012 to €170mn in 2014. In addition, 3 Ireland more or less reached break-even in 2014, although, as this was before the cost-cutting initiatives noted above had made their full impact, it is likely that the company's performance will improve in 2015. This leaves Italy as a continued drag on 3 Group's European financial performance – the fact that the company made next to no return on its investment there between 2011 and 2013 before becoming loss-making in 2014 highlights the need for Hutchison to merge with Wind.

For several years, Hutchison provided details in its annual report of the split between voice and non-voice average revenue per user (ARPU). This showed that an increasing proportion of ARPU across Europe was being generated from non-voice sources. This would suggest that Hutchison has been successful in adapting to a market increasingly driven by smartphones and data. If we look at the figures that are available, namely, for blended ARPU between 2010 and 2014 (inclusive), a complex picture appears. ARPU has halved in Italy, which comes as no surprise, given the overall financial performance of the company noted above. ARPU has also fallen quite a lot in Denmark but by somewhat less in Sweden and the UK. In Ireland, however, ARPU rose initially only to fall to a slightly greater value in 2014 than it recorded in 2010.

The prospects for 2016 are cloudy if only because it is by no means certain that Hutchison will be able to purchase $\rm O_2$ UK. While Hutchison has been able to acquire rivals in Austria and Ireland and Telefónica has been allowed to merge with E-Plus in Germany, it has been suggested that the collapse of the proposed Telenor merger with TeliaSonera in Denmark signifies a change in attitude by the European Commission towards deals that result in fewer operators (Thomas, 2015i; Thomas and Barker, 2015). The Danish merger would have reduced the number of operators from four to three, but with two of the remaining companies – TDC and Telenor/TeliaSonera – remaining considerably larger than Hutchison (Cellular-News, 2015a; Thomas, 2015i). For the merger to go ahead, Telenor/TeliaSonera would have been obliged to dispose off assets sufficient to create a fourth operator in the Danish market (Thomas and Barker, 2015) which they ultimately considered to be uneconomic.

The implications of the Danish merger for the UK deal are unclear. If the European Commission insists on the entry of a replacement fourth operator, this will probably so undermine the economic rationale for the merger between O_2 UK and Hutchison that the deal will be terminated. However, the European Commission has stated several times that the merits of every deal are evaluated on their own terms (Thomas, 2015i; Thomas and Barker, 2015) – in other words, the conditions imposed in the Danish case are not precedent-setting, so the concessions demanded in the UK may be less stringent than in

Table II Earnings (loss) before interest and tax, 3 group, 2010-2014									
Country (currency)	2010	2011	2012	2013	2014				
Austria (€ mn)	4	2	16	106	170				
Denmark (DKK mn)	-	360	349	420	425				
Ireland (€ mn)	(78)	(54)	0	(29)	0.1				
Italy (€ mn)	96	6	0.5	0.3	(46)				
Sweden (SEK mn)	-	1,171	1,065	807	994				
Sweden & Denmark (SEK mn)	137	_	-	_	_				
UK (£ mn)	17	30	101	207	314				
Sources: Hutchison Whampoa (2011, 2012, 2013, 2014, 2015)									

Denmark. Hutchison will obviously argue that the UK and Danish markets are very different. In Denmark, the merger would have created a virtual duopoly, while, in the UK, the post-merger market structure, even excluding new entry, would be guite different, with three operators each controlling more than 20 per cent of the market: Vodafone (21.2 per cent), BT (28.1 per cent) and 3/O₂ (40 per cent) (Thomas, 2015i).

As Telefónica has reoriented its international focus away from northern Europe and towards Latin America, a reasonable question to ask is whether it has run at a profit those businesses that it acquired as part of mmO2 in 2005/2006. Telefónica acquired mmO2 for €26.1bn, offset by selling Airwave O2, Manx Telecom and O2 Ireland collectively for €3.9bn. In addition, when completed, the sale of O₂ UK will raise another €13.5bn. Telefónica also raised €1.5bn when it floated Telefónica Deutschland in 2012. Thus, while Telefónica paid €26.1bn for mmO₂, its dismantling has raised €18.9bn.

Between 2006 and 2014 (inclusive), Telefónica ran its operations in Germany, Ireland and the UK at a profit. The cumulative profit – defined as operating income before depreciation and amortisation (OIBDA) - in Germany was €8.321bn compared to €1.950bn in Ireland and €15.867bn in the UK. Countering this was the capital expenditure of €7.835bn in Germany, €773mn in Ireland and €7.226bn in the UK. In other words, the surplus of OIBDA over capital expenditure was €486mn in Germany, €1.177bn in Ireland and the much greater sum of €8.641bn in the UK. Finally, Telefónica bought a retail chain in the UK and E-Plus in Germany. Together, these two deals cost Telefónica €5.073bn.

What does this mean in terms of Telefónica making a profit on its purchase of mmO₂? As we can see from Table III, Telefónica paid out €26.135bn but raised €18.869bn from the sale of various operations, producing a "loss" of €7.266bn. The surplus of OIBDA over capital expenditure was €10.304bn. This transformed the "loss" into a "profit" of €3.038bn. However, Telefónica has paid a further €5.073bn to acquire two companies. When this is taken into account, the "profit" once more becomes a "loss" of €2.035bn. Presumably, this will once again turn into a profit once Telefónica Deutschland has been run profitably for several years.

Table III Telefónica's finances in relation to O ₂ group										
	Year									
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Germany										
Capital expenditure	1,224	850	924	122	2,057	558	609	642	849	_
OIBDA ^a	583	473	770	918	944	1,219	1,351	1,308	755	-
Purchase – E-Plus	-	-	-	-	-	-	-	5,000 ^b	_	-
Sale - initial public offering	-	-	-	-	-	-	1,450	-	-	-
Ireland										
Capital expenditure	141	117	83	63	60	61	192	56	_	_
OIBDA	310	316	301	302	275	206	130	110	_	_
Sale - O ₂ Ireland	_	-	-	_	-	_	_	780°	_	_
UK										
Capital expenditure	760	832	717	602	717	732	748	1,385	733	_
OIBDA	1,777	1,923	1,839	1,680	1,830	1,836	1,601	1,637	1,744	_
Purchase – The Link	-	73.5	-	-	-	-	-	-	_	_
Purchase – O ₂ Group	26,135 ^d	-	_	_	_	_	_	_	_	_
Sale – Airwave O ₂ Ltd	_	2,982	_	_	_	_	_	_	_	_
Sale - Manx Telecom	_	_	_	_	157 ^e	_	_	_	_	_
Sale - O ₂ UK	_	_	_	_	_	_	_	_	_	13,500

Notes: € million; aOIBDA = operating income before depreciation and amortization; this sum comprises two elements: €3,700mn that was part of the purchase of KPN and another €1,300mn when Telefónica purchased 4.4% of the floated company; of the headline figure was €850mn, composed of an upfront €780mn payment and an additional €70mn that was performance related; defending a started acquiring shares in late 2005 and completed the purchase in early 2006; ethe sale resulted in a €61mn gain for Telefónica Sources: Telefónica (2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015)

Although the purchase of GVT took place in Brazil, it has also had an impact in Italy. Since receiving its initial equity stake in Telecom Italia, Vivendi has bought additional shares in the Italian incumbent so that it now owns more than a fifth of the company (Thomas *et al.*, 2015). At the same time, Xavier Niel, who controls lliad in France, has acquired an option for 11.2 per cent of Telecom Italia (Thomas *et al.*, 2015)[5]. That more than a third of Telecom Italia is now controlled by two French companies has prompted much speculation, not least regarding whether they are acting in concert with one another (Italy24, 2015), although Xavier Niel has denied this (Mesco, 2015).

This aside, it has been speculated that either or both of the French companies may be positioning themselves to be a "king maker" – the merger of Telecom Italia's Brazilian operations with Oi is one possible deal that has been mentioned, while another is the purchase of Telecom Italia itself by another operator (Thomas *et al.*, 2015). Alternatively, Vivendi may view its stake in Telecom Italia strategically, facilitating its expansion into southern Europe (Thomson, 2015) and helping with the distribution of content in Italy (Thomas *et al.*, 2015). It has also been suggested that Niel is simply a financial investor in Telecom Italia (Italy24, 2015), although, given the arguably precarious nature of the Italian company's finances, such a strategy would be risky (Lex, 2015d).

Given the scale of the challenges that Hutchison has encountered as it has sought to develop its mobile operations in Europe, it does beg the question as to why BT has sought to re-enter the mobile market in the UK. While the purchase of EE would correct the anomaly of BT being the only incumbent telecommunications operator in a major European country without a substantial mobile business, there is a clear financial driver behind the purchase. Table IV charts the financial performance of BT between 2006 and 2014, both at the group and divisional levels. At the group level, revenue peaked in 2009 at £21.390bn before declining to £18.287bn. Net debt also peaked in 2009 before declining to just over £7bn by 2014. In contrast, EBITDA dipped in 2009 before recovering to £6.116bn by 2014.

Table IV Financial performance: BT group (2006-2014)									
	2006	2007	2008	2009	Year 2010	2011	2012	2013	2014
BT Retail EBITDA Operating profit	1,226 814	1,357 912	1,495 1,050	1,585 1,159	1,777 1,318	1,784 1,341	- -	- -	
BT Consumer EBITDA Operating profit	- -	- -	- -	- -	- -	- -	3,925 630	3,846 720	4,019 614
BT Business EBITDA Operating profit	- -	- -	- -	- -	- -	- -	1,098 789	1,047 802	1,037 892
BT Global Services EBITDA Operating profit	700 85	735 70	861 117	261 -515	457 -358	593 -141	835 134	832 207	932 326
BT Wholesale EBITDA Operating profit	1,447 609	1,500 592	1,395 502	1,316 670	1,353 673	1,356 697	667 408	620 366	614 369
Openreach EBITDA Operating profit	2,028 1,228	1,927 1,220	1,911 1,222	1,996 1,218	1,960 1,104	2,132 1,255	2,618 1,202	2,642 1,214	2,601 1,195
BT Group EBITDA Revenue Net debt	5,517 19,514 7,500	5,633 20,223 7,914	5,784 20,704 9,460	3,301 21,390 10,361	5,162 20,859 9,283	5,557 20,076 8,816	6,034 19,397 7,797	6,143 18,339 9,082	6,116 18,287 7,028
Note: £ million Source: BT (2008, 2009, 2011, 2014a)									

Considerable differences exist between the divisions of BT Group. The single largest source of operating profit is Openreach. Not only was this true for 2014, but it was also true for most of the period covered in Table IV – Openreach was the most profitable division within the BT Group with the exception of only two years (2010 and 2011). Throughout the whole period, the least profitable division was BT Global Services; indeed, this part of the company made a loss between 2009 and 2011 (inclusive) of just over £1bn. While BT Wholesale has been profitable throughout the period covered, a noticeable decline has occurred in recent years: after three years of operating profits of more than £670mn, this significantly declined from 2012 onwards to below £400mn. Furthermore, BT Business is a more profitable part of the group than BT Consumer. This gap appears to be widening, as BT Consumer profitability is declining while that of BT Business is improving.

Viewed as a whole, the BT Group is faced with a dilemma, namely, how to reduce its reliance on Openreach and improve its financial performance in the retail sector. BT has sought to resolve this dilemma through developing its television business in general and BT Sport in particular. The company has acquired content, primarily football, and sought to use this to attract new customers as well as to lock in existing ones. It is perhaps too early to say whether this strategy has been successful, although we can say that it has been expensive. It has been estimated that BT invested more than £2bn (to mid-2015) to develop its sports content (Bogdanov, 2015) and BT has started to complement this investment with the purchase of other types of content (Bogdanov, 2015).

The purchase of EE will provide another means for BT to lock in consumers. Regardless of the extent to which BT offers mobile services as part of quad-play products and services, the purchase will provide BT with a significant new line of business that will reduce its dependence on Openreach. The challenge, however, will be for BT to improve the competitiveness of EE in relation to the potentially enlarged 3 UK and to Vodafone which could itself potentially merge with Virgin Media to provide quad-play products. That Deutsche Telekom and Orange are willing sellers of EE does raise the concern that the market is overly competitive with the result that profitability will continue to decline in the near future. If so, BT will remain dependent on Openreach, a highly regulated business, for the main source of its profitability.

It may be argued that the purchase of EE could play another role within BT. If Ofcom does suggest that BT should divest Openreach, then the purchase of EE effectively replaces one source of revenue and operating profit with another. This would maintain the operational diversity of BT and allow it to bundle mobile with its other services. However, it is unclear at this stage whether EE would offer the same level of contribution to BT's overall profitability as Openreach currently does. Moreover, structural separation would also bring into question the wisdom of investing so heavily in content, not least because it would raise the issue as to whether BT could afford to make so many expensive purchases of content after divesting its most profitable division.

6. Conclusions

This paper serves to illustrate the maxim that the authors have noted many times previously that structural adjustments in mobile markets require both willing buyers and willing sellers. Over the past decade, there have been a good many transactions, primarily in Europe, but there is increasing evidence that the large multi-national operators are seeking to rationalise their network assets by discarding the smaller and/or less profitable (or, increasingly, the loss-making) among them and concentrating upon particular countries/regions. As a result, a number of what would not long ago have been regarded as "core" assets, such as the UK networks of Deutsche Telekom, France Télécom and Telefónica in the UK, have come onto the market and, in response, the likes of BT, Hutchison Whampoa and France's Iliad have stepped forward as willing buyers because they have a substantially different view of how to build a profitable presence in Europe.

In this regard, the move towards the provision of quad-play has become increasingly significant. In the early 2000s, the emphasis was upon specialisation – Vodafone, for example, preferred to shed fixed-wire assets acquired in its takeovers – but that is no longer the way forward. The ubiquity of smartphones means that mobile subscribers increasingly want high-speed Internet connectivity to access all kinds of applications including video and films which they could not access until HSPA+ and LTE became the norm. But video and film were traditionally the preserves of, for example, cable companies like Liberty Global, and mobile network operators have accordingly been forced to acquire non-mobile assets at prices inflated by the sudden surge in demand.

Selling unprofitable networks is one way to finance this new strategy and it is not always the obvious networks that are being put up for sale – as noted, putting EE on the block looks quite surprising if judged purely in terms of ownership (France Télécom and Deutsche Telekom). These networks are unlikely to attract bids from comparable operators which face the same kinds of financing issues. However, they do seem attractive to operators which need to scale-up and some are well-funded (predominantly Hutchison), which need to move away from their traditional spheres of influence in the hope of offsetting increasing competitive and regulatory pressure (for example, América Móvil) or which seek, as does BT, to re-enter previously exited markets in the pursuit of quad-play.

Needless to say, this restructuring involves large sums of money. That Hutchison has sought the financial assistance of a range of sovereign wealth funds suggests that there are limits to even its financial resources. More broadly, however, the consolidation needs to be justified financially. While cost-cutting and scale economies will undoubtedly make a (significant) contribution in this respect, bundled "quad-play" services and price increases are also likely to play a role. Operators will want to raise prices, but as the number of companies in the market decreases through consolidation, they will come under increased scrutiny and pressure from regulators and consumer groups. The outcome of this clash between the regulator and the regulated is certainly intriguing.

The extent to which operators will be able to raise prices is one area of future research. A reasonable expectation is that prices will increase, but not by as much as operators would like and more than consumer groups would want. A second area of future research is to examine how bundling, especially in the context of fewer operators and expensive sports content, will impact on the marketplace. For example, will bundling replace price competition as the driver of churn within the marketplace?

Notes

- 1. While reports at the time of the merger suggested that part of the combined operator's annual investment of around €3bn would be directed towards "developing digital offerings" (Hughes and Mance, 2015), it was unclear what this meant in practice. Moreover, it was also unclear how the merger would guicken the pace of innovation and investment within Italy.
- 2. It is perhaps worth noting that while Airdata AG has lodged an appeal against the merger at the EU General Court, almost no information is provided on the court's website regarding this action.
- 3. In August 2014, Telecom Italia offered just €1.7bn in cash plus 15 per cent of a combined GVT/TIM and 20 per cent of Telecom Italia (Wood, 2014a).
- 4. In mid-November 2014, the CEO of Orange stated that EE would not continue as a joint venture between Deutsche Telekom and Orange beyond the short term (Lennighan, 2014e).
- 5. Interestingly, the options are held by Rock Investment and not by Iliad itself (Italy24, 2015).

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